providing a non-luminescent microporous membrane formed by a phase inversion process, the process comprising the acts of:

formulating a dope comprising a solvent, one or more non-solvents, opaque solids, and polyamide(s);

mixing the dope to cause dissolution of the polyamide and opaque solids therein;

producing an opaque solids-filled phase inversion dope;

casting a portion of the opaque solids-filled phase inversion dope; and

quenching the cast portion of the opaque solids-filled phase inversion dope to form a non-luminescent, microporous membrane;

providing a surface treatment;

applying the surface treatment to the non-porous substrate; and

intermingling the non-porous substrate having the surface treatment with the non-luminescent, microporous membrane such that the non-porous substrate is sufficiently covalently bonded to the non-luminescent microporous membrane wherein the combination produced thereby is useful in microarray applications.

2. The method of claim 1 wherein the surface treatment is selected from the group comprising:

3-aminopropyl triethoxysilane, N-(2-aminoethyl)-3-aminopropyl trimethoxysilane, 3-glycidoxypropyltrimethoxysilane, (10-carbomethoxydecyl) dimethylchlorosilane or 2-(3,4-epoxycyclohexyl)-ethyltrimethoxysilane.

3. The method of claim 1 wherein, the surface treatment comprises a 3-aminopropyl triethoxysilane followed by treatment with a polyamido-polyamine epichlorohydrin resin.

4. The method of claim 1 wherein, the non-porous substrate is selected from the group comprising:

glass, Mylar, ceramic, acrylic, polypropylene, polycarbonate, polysulfone, polyamide and polyaramid.

5. The method of claim 1 wherein, the non-porous substrate is glass.

6. The method of claim 1 wherein, the non-porous substrate is a polyester.

7. The method of claim 1 wherein, the non-porous substrate is Mylar.

8. The method of claim 7 wherein, the surface of the Mylar is oxidized with sulfuric acid or corona discharge to enable it to bond to a polyamido-polyamine epichlorohydrin polymer.

9. The method of claim 1 wherein the opaque solids are carbon particles.

10. The method of claim 1 wherein the carbon particles are less than 5 microns in size.

11. The method of claim 1 wherein the carbon particles are substantially uniformly distributed throughout the non-luminescent microporous membrane.

12. The method of claim 1 wherein the carbon particles are partially incorporated into the non-luminescent microporous membrane.

13. The method of claim 1 wherein the carbon particles are substantially wholly incorporated into the non-luminescent microporous membrane.

14. The method of claim 1 wherein the non-luminescent microporous membrane is charge-modified.

15. A composite microarray slide, useful for carrying a microarray of biological polymers comprising:

a substantially non-reflective microporous membrane which provides little fluorescence from about three hundred (300) nm to about seven hundred (700) nm formed by a phase inversion process, the non-reflective microporous membrane comprising:

a phase inversion support; and

a plurality of opaque solids that are substantially chemically non-reactive with the phase inversion support and intimately bound to, and/or partially/completely contained within, said phase-inversion;

a non-porous substrate; and

a surface treatment, operatively positioned between the substantially non-reflective microporous membrane and the non-porous substrate, for sufficiently covalently bonding the non-porous substrate to the microporous membrane wherein the combination composite microarray slides produced thereby are useful in microarray applications.

16. The composite microarray slide of claim 15 wherein, the surface treatment is selected from the group comprising:

3-aminopropyl triethoxysilane, N-(2-aminoethyl)-3-aminopropyltrimethoxysilane, 3-glycidoxypropyltrimethoxysilane, (10-carbomethoxydecyl) dimethylchlorosilane or 2-(3,4-epoxycyclohexyl)-ethyltrimethoxysilane.

17. The composite microarray slide of claim 15 wherein, the non-porous substrate is selected from the group comprising:

glass, Mylar, ceramic, acrylic, polypropylene, polycarbonate, polysulfone, polyamide and polyaramid.

18. The composite microarray slide of claim 15 wherein, the surface treatment comprises a 3-aminopropyl triethoxysilane followed by treatment with a polyamido-polyamine epichlorohydrin resin.

19. The composite microarray slide of claim 15 wherein, the non-porous substrate is glass.

20. The composite microarray slide of claim 15 wherein, the non-porous substrate is a polyester.

21. The composite microarray slide of claim 15 wherein the, the non-porous substrate is Mylar.

22. The composite microarray slide of claim 15 wherein the membrane is selected from the group consisting of:

Nylon 66, Nylon 46, Nylon 6, polysulfone, polyethersulfone, polyvinylidenediflouride (PVDF).

23. The composite microarray slide of claim 15 wherein the phase-inversion support comprises polyamides.

24. The composite microarray slide of claim 15 wherein the opaque solids are pigments.

25. The composite microarray slide of claim 15 wherein the opaque solids are carbon particles.

26. The composite microarray slide of claim 15 wherein the phase inversion support has been charge-modified.

27. The composite microarray slide of claim 15 wherein carbon particles are less than five microns in size.

28. The composite microarray slide of claim 15 wherein carbon particles are substantially uniformly distributed throughout the phase-inversion support.

29. The composite microarray slide of claim 15 wherein the carbon particles are partially incorporated into the phase-inversion support.

30. The composite microarray slide of claim 15 wherein the carbon particles are substantially wholly incorporated into the phase-inversion support.

31. The composite microarray slide of claim 15 wherein the phase-inversion support has been charge-modified.

32. Composite microarray slides, useful for carrying a microarray of biological polymers comprising:

an optically passive substrate comprising:

a phase-inversion support and opaque solids that are substantially non-reactive chemically with the phase-inversion support, in a weight ratio with the phase-inversion support such that the optically passive substrate absorbs light at substantially all wave lengths from about 300 nm to about 700 nm;

a non-porous substrate; and

a surface treatment, operatively positioned between the optically passive substrate and the non-porous substrate, for sufficiently covalently bonding the non-porous substrate to the optically passive substrate wherein the combination composite microarray slides produced thereby is useful in microarray applications.

33. The composite microarray slide of claim 32 wherein the optically passive substrate comprises polyamide.

34. The composite microarray slide of claim 32 wherein the optically passive substrate is in the form of a membrane.

35. The composite microarray slide of claim 32 wherein the opaque solids are carbon particles.

36. The composite microarray slide of claim 35 wherein the carbon particles are less than about 5 microns in size.

37. The composite microarray slide of claim 35 wherein the carbon particles are substantially uniformly distributed throughout the optically passive substrate.

38. The composite microarray slide of claim 35 wherein the carbon particles are partially incorporated into the optically passive substrate.

39. The composite microarray slide of claim 37 wherein the optically passive substrate absorbs light at substantially all wavelengths from about 300 to about 700 nm.

40. The composite microarray slide of claim 32 wherein the phase-inversion support has been charge-modified.

41. The composite microarray slide of claim 39 wherein the optically passive substrate has a reflectance of no more than 50% of incident light at any wavelength within about 300 to about 700 nm.

42. The composite microarray slide of claim 32 wherein the phase-inversion support is hydrophilic.

43. The composite microarray slide of claim 42 wherein the phase-inversion support is skinless.

44. The composite microarray slide of claim 43 wherein the phase-inversion support comprises nylon.

45. The method of claim 1 wherein the polyamide(s) is selected from the group consisting of:

Nylon 66, Nylon 46, Nylon 6, polysulfone, polyethersulfone, polyvinylidenediflouride (PVDF).